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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,160	12/22/2003	Hans Gschwend	DT-6694	7764
30377	7590	03/29/2006	EXAMINER	
DAVID TOREN, ESQ. ABELMAN FRAYNE & SCHWAB 666 THIRD AVENUE NEW YORK, NY 10017-5621			HARRIS, KATRINA B	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,160	Applicant(s) GSCHWEND ET AL.	
	Examiner Katrina B. Harris	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 5,6,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Odoni et al. (6,722,548).

Odoni et al. discloses, as in **claim 1**, a combustion-engined setting tool for drifting fastening elements in an object, comprising a combustion chamber (13), a fuel source (11), a fuel conduit (12) connecting the fuel source (11) with the combustion chamber (13) . for feeding fuel thereinto, and at least one metering device (24) for metering a

predetermined amount of fuel for effecting a setting process, the at least one metering device (24) including at least one metering chamber (24); means for adjusting a metering chamber volume for metering the predetermined amount of fuel, and a displaceable piston body (34) for a pulsed ejection of fuel from the metering chamber (24).

With regard to **claim 7**, a control device (20) for the metering device (24), and sensor means (22) for sensing at least one of parameters of the setting tool and of environment and for communicating the at least one parameter to the control device(20), the control device (20) providing for adjustment of a volume of the metering chamber (24) for each operational cycle dependent from the sensed, at least one parameter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odoni et al. (6,722,548) in view of Voelker et al. (6,877,308). Regarding **claim 2**, Odoni et al discloses the claimed invention except wherein the metered chamber volume is adjusted by adjusting an initial position of the displaceable piston body. Voelker et al. discloses wherein the metered chamber volume is adjusted by adjusting

an initial position of the displaceable piston body (30,31). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the piston body of Voelker et al. in the invention of Odoni et al. to improve fuel efficiency.

With regard to **claim 3**, Odoni et al discloses the claimed invention except wherein the metering device comprises a static body, and the metering chamber is enclosed between the displaceable piston body and the static body, and wherein adjusting means comprises an adjustment device for adjusting the initial position of the displaceable piston body.

Voelker et al. the metering device comprises a static body, and the metering chamber (30a,30b) is enclosed between the displaceable piston body (30,30) and the static body, and wherein adjusting means comprises an adjustment device for adjusting the initial position of the displaceable piston body (30,31). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the arrangement of Voelker et al. as stated above in the invention of Odoni et al. for ease of operation of the tool.

With regard to **claim 4**, Odoni et al. discloses a sensor for sensing the pressure and humidity of the surrounding air and cooperating with the adjustment device. Odoni et al. does not disclose means for sensing temperature of a surrounding air. Although Odoni et al. does not disclose a temperature sensor, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the temperature of the surrounding air since measuring the air pressure and humidity is in direct correlation with measuring the temperature of the surrounding air.

With regard to **claim 10**, Odoni et al discloses the limitations of the claimed invention except the metering chamber having valve means. Voelker et al. discloses the metering chamber and valve means. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the valve means of Voelker in the invention of Odoni et al. for ease of operation.

With regard to **claim 11**, Odoni et al discloses the limitations of the claimed invention except the details of the piston body. Voelker et al discloses the displaceable piston body is formed as a pot-shaped piston a pot space of which forms the metering chamber (30a,30b) a nozzle opening. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the details of the piston body of Voelker in the invention of Odoni et al. for ease of operation.

With regard to **claim 12**, Odoni et al discloses the limitations of the claimed invention except the inlet is formed by an axial through-channel formed in the static body and having at an end thereof remote from the metering chamber a nozzle opening. Voelker et al. discloses the inlet is formed by an axial through-channel formed in the static body and having at an end thereof remote from the metering chamber a nozzle opening. It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the inlet is formed by an axial through-channel formed in the static body and having at an end thereof remote from the metering chamber a nozzle opening of Voelker et al. in the invention of Odoni et al. to improve efficiency of the invention.

With regard to **claim 13**, Odoni et al discloses the limitations of the claimed invention except valve means. Voelker et al. discloses the metering device comprises valve means for controlling flow through the axial through-channel and including a valve rod displaceable through a passage formed in the displaceable piston body and a pot space thereof and having a valve head, and a valve seat provided at an opening of the through-channel adjacent to the metering chamber for sealingly receiving the valve head. It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the valve means of Voelker et al. in the invention of Odoni et al. to improve efficiency of the invention.

Allowable Subject Matter

Claims 5, 6, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katrina B. Harris whose telephone number is 571-272-4842. The examiner can normally be reached on 5:30 AM -2:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 571-272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Katrina B. Harris
Examiner
Art Unit 3747

KBH



Willis R. Wolfe
Primary Examiner

Art Unit 3747